

REMARKS

In response to the Office Action mailed September 29, 1997, applicant respectfully requests reconsideration. To further the prosecution of this application, amendments have been made in the claims, and the claims as presented are believed to be in allowable condition. Claims 1-13, 15, 17-23 and 25 are pending in this application. Claims 1, 7, 11, 15, 18 and 23 have been amended herein. Claim 26 has been canceled.

The drawings were objected to under 37 C.F.R. §1.83(a). The Office Action states that the specific diode connections of claim 11 must be shown or the features canceled from the claim. Claim 11 has been amended to correctly recite the connection of the recited diode.

Claims 7 and 12 were rejected under 35 U.S.C. § 102(b) as being anticipated by Pianka. In paragraph 6, the Office Action suggests incorporating the language "directly connected" into the claims to distinguish over the Pianka reference. Accordingly, applicant has amended independent claim 7 to recite a first transistor having a first terminal coupled to a first supply voltage and a second terminal directly connected to a second supply voltage, a second transistor having a first terminal directly connected to a third terminal of said first transistor and a second terminal directly connected to said second supply voltage and a capacitor directly connected between a third terminal of said second transistor and said first supply voltage. Therefore, independent claim 7 should be allowable over Pianka, and the 35 U.S.C. § 102(b) rejection of independent claim 7 should be withdrawn. In addition, claims 9 and 10 recite additional distinctions that are not taught or suggested by the cited references.

Claim 12, which depends from independent claim 7, is allowable for at least the same reasons.

Claims 9, 10, 18 and 26 were rejected of the 35 U.S.C. § 103(a) as being unpatentable in view of Pianka.

Based on the amendment to independent claim 7 from which claims 9 and 10 depend, applicant respectfully asserts that claims 9 and 10 are also allowable over Pianka, and that the rejection of claims 9 and 10 under 35 U.S.C. § 103(a) should be withdrawn.

Independent claim 18 has been amended to incorporate the Examiner's suggested language "directly connected". Amended independent claim 18 now recites a device for protecting a circuit from voltage surges comprising a first means for switching coupled to a first power supply and directly connected to a second power supply, a second means for

switching directly connected between said first power supply and said second power supply, a capacitor directly connected between said first means for switching and said first power supply, a first resistor directly connected between said first means for switching and said second power supply and a second resistor directly connected between said means for switching and said first power supply. Amended independent claim 18 further recites that, upon the occurrence of a voltage surge on said first power supply, said means for switching closes, thereby supplying a voltage to said second means for switching, which also closes, thereby causing a short circuit between said first and said second power supplies. Therefore, since Pianka does not teach or suggest a device such as is recited in amended independent claim 18, amended independent claim 18 is allowable over Pianka and the 35 U.S.C. § 103(a) rejection of independent claim 18 should be withdrawn.

Claim 1-6, 8, 11, 13 and 19-22 were rejected in the 35 U.S.C. § 103(a) as being unpatentable over Pianka in view of Koepp. The Office Action states that it would have been obvious to one having ordinary skill in the art to incorporate the teachings of Koepp and the disclosure of Pianka, as a matter of engineering design choice, to offer protection from any number of transient conditions.

Claim 1 has been amended to incorporate the Examiner's suggested language, "directly connected," and now recites a device for protecting a circuit against voltage surges, comprising a MOS transistor of a first type directly connected to first and second supply terminals by its source and its drain, respectively, a MOS transistor of a second type directly connected between the second supply terminal and the gate of the transistor of the first type by its source and its drain, respectively, and a capacitor having a first terminal directly connected to the first supply terminal and a second terminal directly connected to the gate of the transistor of the second type. Applicant respectively asserts that amended independent claim 1 is allowable over the combination of Pianka and Koepp, since the Koepp reference only is relied upon because of its teaching of the use of different transistor types (Part 4, lines 14-18 of the Office Action) and since the specific connection recited in amended independent claim 1 are not taught or suggested by Pianka. Therefore amended independent claim 1 is allowable over the combination of Pianka and Koepp, and the rejection of claim 1 under 35 U.S.C. § 103(a) should be withdrawn.

Claims 2-6 depend from amended independent claim 1 and are allowable for at least the same reasons.

Claims 8, 11 and 13 depend from amended independent claim 7 and are allowable for at least the same reasons as amended independent claim 7.

Claims 19-22 depend from amended independent claim 18 and are allowable for at least the same reasons as amended independent claim 18.

Claims 15, 17, 23 and 25 were rejected under 35 USC Section 103(a) as being unpatentable over Banura in view of Merrill. The Office Action states that, although Banura discloses the use of a sensing resistor for triggering and Merrill teaches a capacitor in conjunction with a resistance may be utilized in the triggering of the protective feature of the circuit, it would have been obvious to one having ordinary skill in the art to incorporate the teachings of Merrill into those of Banura, in that the use of a capacitor for triggering purposes would be a less power-dissipating design during normal circuit operation and would offer responsive triggering during spike conditions.

Independent claim 15 has been amended to incorporate the phrase "directly connected" as suggested by the examiner. Amended independent claim 15 now recites a device for protecting a circuit against voltage surges comprising a first transistor having a first terminal directly connected to a first power supply and a second terminal directly connected to a second power supply, a second transistor having a first terminal directly connected to said first power supply and a second terminal connected to a second power supply and directly connected to a third terminal of said first transistor and a third transistor having a first terminal directly connected to said first power supply and a second terminal coupled to said second power supply and directly connected to a third terminal of said second transistor, and a third terminal connected to said first power supply through a capacitor. The third terminals of said first, second and third transistors are connected to said second power supply through first, second and third resistors, respectively.

The applicant respectively asserts that amended independent claim 15 is allowable over the combination of Banura and Merrill, since the combination does not teach or suggest the device recited in amended independent claim 15. The applicant respectively asserts that the first transistor, T3, as set forth in paragraph 5 of the Office Action does not have a first terminal directly connected to a first power supply and a second terminal directly connected a

second power supply. The applicant respectively asserts that it would not be obvious to modify Banura such that two terminals of the transistor T3 are directly connected to first and second supply voltages, respectively. With respect to transistor T3 of Banura, although the emitter is directly connected to a voltage supply, the collector is connected to the ground terminal through and RC device. Banura does not teach or suggest that the collector terminal of transistor T3 may be directly connected to the ground terminal. Therefore, since it would not be obvious to modify Banura in such a way as to make the device recited in independent claim 15 obvious, independent claim 15 is allowable over the combination of Banura and Merrill, and the rejection under 35 U.S.C. § 103(a) should be withdrawn.

Claim 17, which depends from independent claim 15, is allowable for at least the same reasons.

Independent claim 23 has been amended to incorporate the language suggested by the Examiner. Amended independent claim 23 now recites a device for protecting against voltage surges comprising a first means for switching having a first terminal directly connected to a first power supply and a second terminal directly connected to a second power supply, a second means for switching having a first terminal directly connected to said first power supply and a second terminal coupled to said second power supply and directly connected to a third terminal of said first means for switching and a third means for switching having a first terminal directly connected to said first power supply, a second terminal coupled to said second power supply and directly connected to a third terminal of said second means for switching and a third terminal connected to said first power supply through a capacitor. The third terminals of the first, second and third means for switching are connected to said second power supply through first, second and third resistors, respectively.

Applicant respectfully asserts that amended independent claim 23 is allowable over the combination of Banura and Merrill for the same reasons set forth above in response to the rejection of claim 15. Therefore, since it would not be obvious to modify Banura in such a way as to make the device recited in independent claim 23 obvious, independent claim 23 is allowable over the combination of Banura and Merrill, and the rejection under 35 U.S.C. § 103(a) should be withdrawn.

Claim 25 depends from amended independent claim 23, and is allowable for at least the same reasons.

In view of the foregoing amendments, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the applicant's attorney at the number listed below.

If this response is not considered timely filed and if a request for extension of time is otherwise absent, applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to the deposit account number 23/2825.

Respectfully submitted,

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